UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/459,574	12/13/1999	GEN SASAKI	6318-0022-2	1341

22850	7590	01/14/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
TRAN, NHAN T

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/459,574	SASAKI, GEN
	Examiner	Art Unit
	Nhan T. Tran	2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _1_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _14 October 2003_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _7-11 and 15-17_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claim(s) _1-6,12-14 and 18-27_ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-6, 12-14 and 18-27 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that a search and examination of the entire application would not place a serious burden on the Examiner. This is not found persuasive because it is clear that the inventions I, II, III and IV are related as subcombinations disclosed as usable together in a single combination and each invention is classified in different subclasses that would place a serious burden on the Examiner:

I. Claims 1 – 6, 12 – 14 & 18 - 27, drawn to combined signal generator and general image signal processing, classified in class 348, subclass 222.1.

II. Claims 7 - 11, drawn to shading or black spot correction, classified in class 348, subclass 251.

III. Claims 15 - 16, drawn to defective pixel (e.g., signal replacement), classified in class 348, subclass 246.

IV. Claim 17, drawn to gray scale transformation (e.g., gamma correction), classified in class 348, subclass 254.

Inventions I, II, III and IV are related as subcombinations disclosed as usable together in

a single combination. The subcombinations are distinct from each other if they are shown to be

separately usable:

Invention IV has separate utility such as "gamma compensation table of performing,

when given a N-bit length pixel data, gamma compensation processing about said pixel data; and

a selector in which, when given a N-bit length pixel data, said pixel data is inputted to said

gamma compensation table; and when given a (N-2)-bit length pixel data, switching is made so

that four data rows sequentially provided as a (N-2)-bit length pixel data, are respectively

inputted to four look-up tables obtained by dividing said gamma compensation table into four"

which is not required by the inventions I, II and III.

Invention III has separate utility such as "a defective pixel compensation block that reads

defective pixel addresses stored in said main memory disposed outside of said real time

processing unit, and performs defective pixel compensation when a pixel address of a pixel data

residing in image matches said defective pixel address" which is not required by the inventions I,

II and IV.

Invention II has separate utility such as cumulative addition processing function,

circulation addition processing function and shading compensation which are not required by the

inventions I, III and IV.

Invention I has separate utility such as pixel data of image temporarily stored in a main

memory, which is not required by the inventions II, III and IV.

See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a

separate status in the art as shown by their different classification, restriction for examination

purposes as indicated is proper.

In addition, upon further consideration of the elected Group I, claims 1-6, 12-14 and 18-

27, the elected Group I contains claims directed to the following patentably distinct species:

1. Species I corresponds to Fig. 4.

2. Species II corresponds to Figs. 11-14.

3. Species III correspond to Fig. 15.

4. Species IV corresponds to Fig. 19.

5. Species V corresponds to Fig. 25.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for

prosecution on the merits to which the claims shall be restricted if no generic claim is finally

held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the

species that is elected consonant with this requirement, and a listing of all claims readable

thereon, including any claims subsequently added. An argument that a claim is allowable or that

all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP §

809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct,

applicant should submit evidence or identify such evidence now of record showing the species to

be obvious variants or clearly admit on the record that this is the case. In either instance, if the

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission

may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The

examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for

the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

NT.